

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-005339**Date Inspected:** 21-Jan-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Shi Lei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment**Summary of Items Observed:**

CALTRANS OSM Quality Assurance (QA) Inspector, Erik Prue was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. QA Inspector and/or found the following:

Bay 13 lift 2AE: QA Inspector randomly observed two (2) ZPMC qualified welders ID#067571 and #067665 welding on segment 007A-032 side panel SP186 to bottom plate BP199. Welders were observed welding in the 4G (overhead) position utilizing Shielded Metal Arc Welding (SMAW) process with a 4 mm diameter electrode THJ506Fe-1 (E7018-1). QA Inspector observed the ZPMC QC Inspector Zhang Xian Ji verifying welding parameters and pre-heat were in accordance with the Welding Procedure Specification (WPS). QA Inspector observed QC Inspector verifying weld parameters as follows: preheat temperature to be at 112°C and measured the welding parameters to be 171 amps, 24.5 volts, and a travel speed of 97 mm/min. Welding parameters verified by QA Inspector appear to be in general compliance with the approved WPS-B-P-2214-B-U2-FCM.

**Summary of Conversations:**

QA Inspector noted on lift 1BE that out of the 26 sub assemblies (side panels, bottom plates, longitudinal diaphragms, and floor beams) only eight (8) components have been green tagged. QA Inspector discussed the missing green tags on the various components listed above with ABF QC Inspector Mr. Warren Buehler. Mr. Buehler explained that the sub assembly component documentation is being investigated and that he will generate a list of the components green tagged and the components missing green tag documentation.

**Comments**

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## WELDING INSPECTION REPORT

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This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Prue,Erik	Quality Assurance Inspector
<b>Reviewed By:</b>	Clifford,William	QA Reviewer

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